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| APPLICATION NO.                                                                  | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------------------|-------------|--------------------------|---------------------|------------------|
| 10/522,136                                                                       | 08/16/2005  | Aidan Charles Pennington | GB9-2002-0038-US1   | 3998             |
| 49056                                                                            | 7590        | 02/07/2007               | EXAMINER            |                  |
| LIEBERMAN & BRANDSDORFER, LLC<br>802 STILL CREEK LANE<br>GAIITHERSBURG, MD 20878 |             |                          | DEWS, BROOKE J      |                  |
|                                                                                  |             |                          | ART UNIT            | PAPER NUMBER     |
|                                                                                  |             |                          | 2182                |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|----------------------------------------|------------|---------------|
| 3 MONTHS                               | 02/07/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                        |                           |  |
|------------------------------|------------------------|---------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>       |  |
|                              | 10/522,136             | PENNINGTON, AIDAN CHARLES |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>           |  |
|                              | Brooke J. Dews         | 2182                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 16 August 2005.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 11-40 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 11-40 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 January 2005 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/31/2006.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. The preliminary amendment filed on 01/24/2005 has been considered by the examiner. The instant application having application no. 10/522136 has a total of 30 claims pending in the application, there are 6 independent and 24 dependent claims, all of which are ready for examination by the examiner.

### ***Drawings***

2. The drawings are objected to because black-boxes (102, 110-122) should be labeled with appropriate function (i.e. SAN 102, system component 110 and 118, and so on) to better illustrate the claimed invention to the public. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Information Disclosure Statement***

3. As required by M.P.E.P. '609(C), the applicant's submission of the Information Disclosure Statement dated 10/31/2006, is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P '609C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 11-16, 18-23, 25-30, 32-33, 35-37, and 39-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "transactional" is claimed to be one element in a "group", of which consist of another element being "persistent". The term "transactional" is not defined in the specification. Though the specification mentions (Paragraph [0009-0014]), controlling a message that is "transactional or persistent", it is unclear as to whether transactional and persistent are to be understood as the same "type of message" or of different "types of

messages". For the purpose of examination the term "transactional" will be considered as a message different from a "persistent" message. Correction/ Clarification is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 12 recites the limitation "said queue" in line 1. There is insufficient antecedent basis for this limitation in the claim. There are 1 of 2 adjustments that need to be made in order to overcome this rejection. Claim 12 should state either "said message queue" or "said queue system" or claim 11 should include "a queue".

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 26-32 and 40 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Claims have to have practical application that produces a "Useful, Concrete, and Tangible Result". (For processes, the claim limitations will define steps or acts to be performed. For products, the claim limitations will define discrete physical structures or materials.) Claims 26-32 and 40 recite an "article" comprising a computer-readable signal-bearing medium" (signal-bearing is interpreted to be a carrier wave) wherein the product might not be limited to tangible embodiment. Applicant provides (in paragraph 11 and 14 of the specification) evidence that applicant intends the **article is provided in a computer-readable**

**signal-bearing medium.** As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

To expedite a complete examination of the instant application, the claims rejected under 35 USC 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention and to overcome the abstract idea rejection above. Correction/clarification required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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7. Claims 11, 12, 17-20, 24-27, 31-38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over George Black et al. (US Patent 5878056), hereafter Black, in view of Ahmad Hassan Tawil (US Patent 6421723), hereafter Tawil.

**Regarding claim 11 and 33** Black discloses a computer system comprising:

+  
an asynchronous message (**asynchronous communication**) and queue system (via **MQSeries product**; **Column 9 line 13-30**);

a controller (via **message channel agent, MCA 180/ 180' and 190/190'**; **Figure 3**) in communication with said asynchronous message and queue system (via **MQSeries product**);

said controller (**MCA**) having control means (via **transport connection 195**) adapted to control (**moving the messages**) a message queue on behalf of a queue manager (**130/130'**); (**Column 8 line 60-63**)

and said controller (**MCA**) adapted to control a message (**send/receive a message**) selected from a group (**batch**) consisting of: transactional (**other messages**) and persistent (**messages that cause rejection/ problematic destinations**). (**abstract**)

Black, however, does not explicitly disclose a computer system comprising a storage area network.

Tawil discloses a computer system comprising a storage area network (**SAN 12; Figure 1**).

Black and Tawil are analogous art because they are from the similar problem solving areas involving reduction of overhead in a network environment.

Therefore, it would have been obvious to combine Tawil with Black for the benefit of offering centralized storage of data for increased efficiency and data handling, and to provide data access reliability/availability and improve data backup and recovery to obtain the invention as specified in claim. (**Column 1 line 29-35 of Tawil**)

**Claim 12** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system (**Figure 2 and 3**) wherein said queue (**destination queue 170/170' and transmission queue 160/160'**) is adapted to support simultaneous access by a first queue

manager (**message queue manager 130**) and a second queue manager (**message queue manager 130'**). (**Figure 3**)

**Claim 17** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system wherein said transactional message control (**via sending/ receiving MCA; Figure 5**) is in the form of a syncpoint coordinator (**via syncpoint-manager-controlled unit 330 and 360**). (**Column 12 line 9-11, 25-27, 42-46; Figure 5**)

**Claim 18** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system wherein said network controller includes a lock manager (**via queue manager software**) adapted to preserve data integrity (**provide reliable storage of queued messages**). (**Column 9 line 27-30**)

**Regarding claim 19, 26, 37, and 40** Black discloses a method for communicating in a computer system (**Figure 2 and 3**) comprising:

managing a queue (**destination queue 170/170' and transmission queue 160/160'**) in a network of said computer system (**10**) supporting an asynchronous messaging (**asynchronous communication**) and queuing system (**via MQSeries product; Column 9 line 13-30**);

receiving a message request (**via MQPUT; Figure 3**) at a queue manager (**message queue manager 130/130'**) of said network (**Figure 2 and 3**);

and passing (**via MQGET**) said received message request (**via MQPUT**) to a network controller (**message channel agent, MCA 180/ 180' and 190/190'**; **Figure 3**) of said network (**Figure 2 and 3**), wherein said controller includes means to control a message (**send/receive a message**) selected from a group (**batch**) consisting of: transactional (**other messages**) and persistent (**messages that cause rejection/ problematic destinations**). (**abstract**)

Though Black reveals a communication network, Black does not explicitly disclose the network to be a storage area network.

Tawil discloses a storage area network (**SAN 12; Figure 1**).

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Black and Tawil are analogous art because they are from the similar problem solving areas involving reduction of overhead in a network environment.

Therefore, it would have been obvious to combine Tawil with Black for the benefit of offering centralized storage of data for increased efficiency and data handling, and to provide data access reliability/availability and improve data backup and recovery to obtain the invention as specified in claim. (**Column 1 line 29-35 of Tawil**)

**Claim 20 and 27** are rejected for the reasons set forth hereinabove for claim 19 and 26, and further Black discloses the method further comprising supporting simultaneous access to said queue (**destination queue 170/170' and transmission queue 160/160'**) by a first queue manager (**message queue manager 130**) and a second queue manager (**message queue manager 130'**). (**Figure 3**)

**Claim 22 and 29** are rejected for the reasons set forth hereinabove for claim 21 and 28, and further discloses the method further comprising tracking a quantity of authorized connection handles (**the process responds success thru "retries"; Column 14 line 48-54**) for said queue (**destination queue 170/170' and transmission queue 160/160'**). (**Claim 4 of Black**)

**Claim 24, 31, and 38** are rejected for the reasons set forth hereinabove for claim 19, 26, and 37, and further Black discloses the method wherein said transaction message control means (**via sending/receiving MCA; Figure 5**) utilizes a syncpoint coordinator (**via syncpoint-manager-controlled unit 330 and 360**). (**Column 12 line 9-11, 25-27, 42-46; Figure 5**)

**Claim 25 and 32** is rejected for the reasons set forth hereinabove for claim 19 and 26, and further Black discloses wherein the step of managing a queue (**destination queue 170/170' and transmission queue 160/160'**) in a network includes preserving data integrity (**reliable storage of queued messages**). (**Column 9 line 27-30**)

**Claim 34** is rejected for the reasons set forth hereinabove for claim 33, and further Black discloses the system wherein said transactional message control means (**via sending/ receiving MCA; Figure 5**) includes a syncpoint coordinator (**via syncpoint-manager-controlled unit 330 and 360**). (**Column 12 line 9-11, 25-27, 42-46; Figure 5**)

**Claim 35** is rejected for the reasons set forth hereinabove for claim 33, and further Black discloses the system wherein said controller includes a lock manager (**via queue manager software**) adapted to preserve data integrity (**provide reliable storage of queued messages**). (**Column 9 line 27-30**)

**Claim 36** is rejected for the reasons set forth hereinabove for claim 33, and further Black discloses the article wherein controller (**message channel agent, MCA 180/ 180' and 190/190'**; **Figure 3**) includes a first queue manager (**message queue manager 130**) and a second queue manager (**message queue manager 130'**) to manage said queue (**destination queue 170/170'and transmission queue 160/160'**), and wherein said queue managers (**130/130'**) are heterogeneous (**via different data processing systems; Column 7 line12-15**). (**Figure 2**)

8. Claim 13-16, 21-23, 28-30, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over George Black et al. (US Patent 5878056), hereafter Black, in view of Ahmad Hassan Tawil (US Patent 6421723), hereafter Tawil as applied to claim 11, 12, 17-20, 24-27, 31-38, and 40 above, and further in view of Applicant's Admitted Prior Art (US Publication 20060155894), hereafter AAPA.

**Claim 13** is rejected for the reasons set forth hereinabove for claim 11, and further Black discloses the system (**Figure 2 and 3**) further adapted to be authorized (**via messages the application programs have agreed to read from**) by said controller and returned to a call request to connect an application with said queue manager (**message queue manager 130'**). (**Column 8 line 51-64**)

Black, however, does not explicitly disclose the system comprising a connection handle.

However, AAPA teaches, in paragraph [0004] and [0005], that it is well within the level of skill in the art to provide a “connection handle” in an asynchronous messaging and queuing system.

**Claim 14** is rejected for the reasons set forth hereinabove for claim 13, and further Black discloses the system further comprising a counter adapted to track a quantity authorized (**the process responds success thru “retries”; Column 14 line 48-54**) for said queue (**destination queue 170/170’and transmission queue 160/160’**). (**Claim 4 of Black**)

**Claim 15** is rejected for the reasons set forth hereinabove for claim 13, and further AAPA discloses the system further comprising an object handle adapted to be dispensed by said queue manager for use in performance of a service to an object. (**Paragraph [0005]**)

**Claim 16** is rejected for the reasons set forth hereinabove for claim 15, and further AAPA discloses the system wherein said object handle and said connection handle function as input parameters to a call request. (**Paragraph [0005]**)

**Claim 21, 28, and 39** are rejected for the reasons set forth hereinabove for claim 19, 26, and 37, and further Black discloses the method further wherein the step of managing a queue (**destination queue 170/170’and transmission queue 160/160’**) in a network includes authorizing to a call request from said queue manager (**message queue manager 130/130’**). (**Column 8 line 51-64**)

Black, however, does not explicitly disclose the system comprising a connection handle.

However, AAPA teaches, in paragraph [0004] and [0005], that it is well within the level of skill in the art to provide a “connection handle” in an asynchronous messaging and queuing system. AAPA discloses the system comprising a connection handle. (**Paragraph [0005]**)

**Claim 23 and 30** are rejected for the reasons set forth hereinabove for claim 21 and 28, and further AAPA discloses the method wherein the step of managing a queue in a storage area network includes dispensing an object handle by said queue manager for performance of a service to an object. (Paragraph [0005])

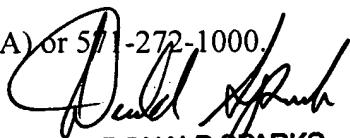
***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clark Lubbers et al. (US Publication 20030188233) because of storage area network abilities in the area of failover to support disaster tolerance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brooke J. Dews whose telephone number is 571-270-1013. The examiner can normally be reached on M-Th 7:30-5:00, alternate F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*BD*  
  
DONALD SPARKS  
SUPERVISORY PATENT EXAMINER